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Studies

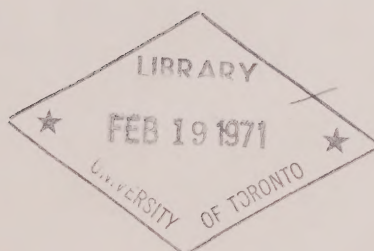
Ontario Department of Labour,
The Honourable Dalton Bales, Q.C., Minister
T.M. Eberlee, Deputy Minister


Research Branch
November 1970

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**The Impact of the Ontario
Hospital Labour Disputes
Arbitration Act, 1965 :
A Statistical Analysis**





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The Impact of the Ontario Hospital Labour Disputes Arbitration Act, 1965 : A Statistical Analysis

Prepared by
Keith McLeod

CONTENTS

	<i><u>Page</u></i>
Foreword	
Introduction	1
Use of Arbitration	3
Proportion of Contracts Settled by Arbitration	3
Incidence of Arbitration by Union, Geographical Area, Size of Bargaining Unit, and First or Renewal Agreement	7
Contract Provisions Determined by Arbitration	10
Time Required to Settle Disputes by Arbitration	13
Impact of Arbitration on Wage Structure	20
Concepts and Criteria Used in Arbitration	21
Wage Differentials Among Hospitals	25
Wage Differentials Between Hospitals and General Industry	31
Appendix A - Wage Differentials Among Hospitals	39
Appendix B - Industries and Occupations Used to Compute an Average Female Labour Rate	61
Appendix C - Ontario Economic Regions	62

FOREWORD

Legislation requiring arbitration of contract disputes became applicable to hospitals in Ontario in 1965. From the beginning, fears were expressed about the consequences of the Act, and as experience was gained these fears turned to complaints. Among the most persistent have been those alleging delays in the arbitration procedure and adverse effects of arbitration on the wage rates and fringe benefits of hospital employees.

To the present, there has been no systematic effort to evaluate the administration and consequences of the Act. This document attempts to fill that need in part by making generally available a compilation of objective information that provides insights into the arbitration process and its consequences. The study presents and analyzes data on how arbitration has affected negotiations, the time taken to carry out the arbitration procedure, and the impact, if any, that arbitration has had on hospital wage structures. The information presented on these issues should help place the discussion of hospital industrial relations policy on firmer ground.

The study was prepared by Keith McLeod. He was assisted in the evaluation of the information used and the design of the work by Gerald Starr. The clerical and secretarial staff of the Research Branch worked on compiling the data and the production of the report.

JOHN KINLEY,
Director,
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November 1970

INTRODUCTION

Public attention is currently focussed on collective bargaining procedures and results in the Ontario hospital industry. This situation arises from continuing controversy surrounding the Hospital Labour Disputes Arbitration Act passed by the Ontario Government in 1965 following a Royal Commission enquiry into a strike at Trenton Memorial Hospital. The legislation is designed to guarantee uninterrupted hospital care, by providing for compulsory arbitration when a hospital union and management fail to reach agreement in a contract dispute.

Despite the fact that strikes are banned, strike threats and several short walkouts have occurred during the past two years. These are part of a continuing protest by union members generated by concern over their ability to achieve their bargaining goals while operating under the Act. All unions in the hospital industry are either demanding changes in or abolition of the Hospital Labour Disputes Arbitration Act. They allege that compulsory arbitration has resulted in:

- a reduction in the effectiveness of the collective bargaining process;
- protracted delays in settling contracts;
- an ever expanding disparity between hospital wages and those in other industry generally.

Although it is too early to assess the long-run impact of the legislation, some useful impressions can be gained from analysis of bargaining experience in the hospital industry during the first five years it was in effect. Accordingly, this study attempts to measure and describe some aspects of that experience in an effort to shed light on the charges laid against the legislation¹. First, the paper discusses the extent to which arbitration has been used and how it has altered the

¹ The study does not cover Homes for the Aged and Psychiatric Institutions, or central laundries and steam plants.

practices of the bargaining parties. To do this, it reports on the number of hospital contracts settled by arbitration or by other means, on the characteristics of the parties that may have affected their decision to use arbitration, and on what contract provisions have been determined by it. The second section of the report discusses the controversial problem of bargaining delays associated with the procedures required by the Act. The final section attempts to measure how arbitration has influenced wage rates within the hospital industry itself and in relation to industry generally.

The study is based on statistical and other data drawn from the Labour Department's records. Important among these sources were:

- conciliation and arbitration records;
- reports on collective bargaining settlements prepared by the Hospital Personnel Relations Bureau and the Ontario Hospital Association;
- contracts held in the Department's Collective Agreements Library.

All of the statistical data on number of settlements reached, hospital wage rates and duration of the bargaining-arbitration process were taken directly or developed from these sources.

The study covers all hospital union contract settlements reached in Ontario between August 1, 1963 and July 31, 1970. The first arbitration award was made on August 10, 1965. Therefore, the non-wage analysis is based on an August 1 to July 31 year, and encompasses two full years before and five after the first award. During this seven year period there were 709 contracts negotiated and the number of bargaining relationships almost doubled as is shown by the following tabulation²:

² One possible indirect impact of the Act not dealt with in this paper is that it might have contributed to the rapid expansion of union organization in hospitals. Compulsory arbitration may have prompted some workers to join unions who otherwise would not have done so because they disapprove of the use of strikes in hospitals. This factor probably was most important for nurses. Prior to 1965 there were no nurses' associations for collective bargaining purposes in hospitals. However, by 1970 more than twenty-five associations had been organized.

Date	Number of Contracts in Effect	Year to Year Increase	
		Number	Per Cent
August 1, 1963	128		
August 1, 1964	135	7	5.5
August 1, 1965	148	13	9.6
August 1, 1966	160	12	8.1
August 1, 1967	178	18	11.2
August 1, 1968	207	29	16.3
August 1, 1969	221	14	6.8
August 1, 1970	243	22	9.1

USE OF ARBITRATION

Proportion of Contracts Settled by Arbitration

After the Act was passed, the extent to which the bargaining parties in hospitals reached voluntary agreements changed but not as drastically as some observers predicted. Information on this point is contained in Table 1 which shows the proportion of contracts settled at the various stages of the collective bargaining-arbitration process. In the two years prior to arbitration, approximately one-half of the settlements were made at the pre-conciliation bargaining stage and one-quarter at the conciliation officer stage. Of the remaining 25 per cent, half were settled by conciliation boards and half in post-conciliation bargaining. Two strikes occurred.

When the Act came into effect, the proportion of non-voluntary agreements increased as the incidence of arbitration awards exceeded that of strikes. Between August 1, 1965 and July 31, 1970, the number of arbitration awards per year grew from thirteen to thirty-nine. In relative terms the growth in awards was less pronounced going from 15 per cent of all settlements to 25 per cent. This growth did not occur

Table 1
Hospital Settlements Reached at Various Stages
of the Bargaining - Arbitration Process,
Years Ended July 31, 1964-70

Settlement Stage	1964 No. %	1965 No. %	1966 No. %	1967 No. %	1968 No. %	1969 No. %	1970 No. %
Total settlements	66 100	78 100	84 100	94 100	115 100	119 100	153 100
Pre-conciliation bargaining	35 53	42 54	41 49	59 63	56 49	48 40	59 39
Conciliation officer	16 24	17 22	25 30	16 17	33 29	29 24	40 26
Conciliation board	7 11	10 13	2 2	-	-	-	-
Post-conciliation bargaining	8 12	9 11	3 4	3 3	5 4	21 18	15 10
Arbitration Award	-	-	13 15	16 17	21 18	21 18	39 25

gradually from one year to another but was heavily concentrated in the final year. Prior to August 1969, the increase in the use of arbitration was almost negligible. In short, since arbitration was introduced there appears to have been a decline in the willingness of the parties to reach voluntary agreement, especially since mid-1969.

A close examination of the stages of settlement data in Table 1 reveals that between August 1, 1965 and July 31, 1968, arbitration awards appear to have replaced conciliation boards and post-conciliation board bargaining as the method of settling the more difficult disputes, that is, those that were not resolved prior to or at the conciliation officer stage. During this period, the proportion of disputes that went beyond the conciliation officer stage did not increase but remained relatively stable at slightly more than 20 per cent of the total. Apparently, arbitration did not lead to a decline in the willingness of the parties to reach a voluntary agreement in the early stages of negotiations. However, this was not the case after August 1968 as the proportion of contracts settled subsequent to the conciliation officer stage increased by approximately 15 per cent.

This shift in the willingness of the parties to reach voluntary agreement in the early stages of negotiations seems to have been related to the Ontario Hospital Services Commission guideline crisis which occurred during late 1968 and early 1969. In October 1968, hospitals were notified by the O.H.S.C. that, within the total budget increase of 8½ per cent for 1969, the limit of the Commission's liability for wage increases was 6½ per cent exclusive of annual merit or progression increases. A number of unions subsequently delayed their contract settlements and mounted a concerted protest over the 6½ per cent "wage guideline". In the spring of 1969, the Commission implemented a policy of global budgeting which allowed hospitals a wage budget increase of 8½ per cent or more in those cases where it could be justified. This change in policy and its clarification to the unions prompted a large number of settlements at the post-conciliation bargaining stage and might have contributed to the increase in the proportion of arbitrated settlements in the last year analyzed. The uncertainty as to the maximum the hospitals would be allocated for

Table 2
Total and Arbitrated Hospital Settlements
by Union and Time Period

Union	Aug. 1, 1965 - July 31, 1970			Aug. 1, 1965 - July 31, 1967			Aug. 1, 1967 - July 31, 1970		
	(1) Total settlements	(2) Arbitrated settlements	(3) 2 as % of 1	(1) Total settlements	(2) Arbitrated settlements	(3) 2 as % of 1	(1) Total settlements	(2) Arbitrated settlements	(3) 2 as % of 1
All Unions	565	110	19	178	29	16	387	81	21
International Union of Operating Engineers (I.U.O.E.)	153	8	5	50	3	6	103	5	5
Canadian Union of Operating Engineers (C.U.O.E.)	70	28	40	29	6	21	41	22	54
Service Employees' International Union (S.E.I.U.)	138	37	27	46	13	28	92	24	26
Canadian Union of Public Employees (C.U.P.E.)	118	22	19	40	7	18	78	15	19
Nurses Associations	52	11	21	3	0	0	49	11	22
Other Unions ¹	34	4	12	10	0	0	24	4	17

¹ Canadian Union of General Employees; Civil Service Association of Ontario; International Union of District 50, Allied and Technical Workers of the United States and Canada (formerly International Union of District 50, United Mine Workers of America); Le Syndicat Des Hospitaliers; Medical Technologists and Technicians Association; Office and Professional Employees' International Union; and several Employees' Associations.

wage increases may have prompted larger demands by the unions and increased resistance by the hospitals.

The information presented above does not reveal one important dimension of the extent of use of arbitration, namely the propensity to resort to it a second time. As of July 31, 1970, there were eighty opportunities for the same two parties to have more than one contract settled by arbitration. In twenty-four (30 per cent) of these cases, arbitration was used a second time. Compared to the incidence of arbitration for all disputes, this finding indicates that there is some increase in the likelihood of two parties resorting to arbitration once this method of dispute settlement has been used. It also suggests some long-term growth in the use of arbitration.

Incidence of Arbitration by Union, Geographical Area, Size of Bargaining Unit, and First or Renewal Agreement

In an effort to isolate determinants of the incidence of arbitration, the settlements data have been classified by a number of variables that may have played an important role. The results of this analysis are presented below.

Union: Apparently the likelihood of a dispute going to arbitration depends in part on the union's policy toward this method of dispute settlement. Table 2 indicates that the incidence of arbitration varies considerably by union. The proportion of contracts settled by awards over the period under review ranged from a low of five per cent for the International Union of Operating Engineers to 40 per cent for the Canadian Union of Operating Engineers; that is, both the highest and the lowest incidence occurs in unions representing operating engineers. The high incidence of arbitration for the C.U.O.E. was particularly concentrated in the last three years and may reflect a change in the union's policy towards arbitration.

Economic Region: The geographical distribution of arbitration awards, as shown in Table 3, is far from uniform. In the five years following August 1, 1965, there were no awards in the Northeastern Ontario region, but nearly one-third of the settlements in the Mid-

Table 3
Total and Arbitrated Hospital Settlements
By Economic Region and Time Period

Economic Region	Aug. 1, 1965 - July 31, 1970			Aug. 1, 1965 - July 31, 1967			Aug. 1, 1967 - July 31, 1970		
	(1) Total settlements	(2) Arbitrated settlements	(3) 2 as % of 1	(1) Total settlements	(2) Arbitrated settlements	(3) 2 as % of 1	(1) Total settlements	(2) Arbitrated settlements	(3) 2 as % of 1
All Regions	565	110	19	178	29	16	387	81	21
Northeastern Ontario	57	0	0	24	0	0	33	0	0
Eastern Ontario	74	11	15	22	0	0	52	11	21
Northwestern Ontario	39	6	15	8	2	25	31	4	13
Niagara	61	10	16	19	3	16	42	7	17
Lake Ontario	31	6	19	11	1	9	20	5	25
Lake Erie	26	6	23	9	4	44	17	2	12
Central Ontario	144	34	24	46	11	24	98	23	23
Lake St. Clair	59	15	25	14	0	0	45	15	33
Georgian Bay	32	9	28	12	4	33	20	5	25
Midwestern Ontario	42	13	31	13	4	31	29	9	31

western Ontario region resulted from arbitration. There is no apparent explanation for these large differences in the use of arbitration between economic regions. A map of the economic regions of Ontario is presented in appendix C.

Bargaining Unit Size: Table 4 indicates that the incidence of arbitration is highest in disputes involving relatively large bargaining units. One interpretation of this finding could be that the larger units may negotiate pattern setting agreements for their area. These settlements may be more difficult to conclude than those that follow, to some degree, patterns already established.

First or Renewal Agreement: Data in Table 5 indicates that the propensity to resort to arbitration does not vary significantly with the length of the bargaining relationship between the parties. The proportion of first agreements that were settled by arbitration between August 1, 1965 and July 31, 1970 was 22 per cent, while 19 per cent of the renewal settlements were based on an award. This small difference is somewhat surprising in view of the difficulties in reaching first agreements common to many industries.

In summary, the analysis in this section seems to indicate that the advent of arbitration has not had a uniform influence on all hospital bargaining in the province. The incidence of arbitration varied considerably by union and economic region and was highest in large bargaining units.

Contract Provisions Determined by Arbitration

Another dimension of the use of arbitration is the degree to which each individual award defines conditions of employment. It would appear that in many disputes few provisions were settled during bargaining prior to arbitration. Table 6 indicates the average number of provisions determined per award was about ten. There were slight variations by type of agreement, union, and year. In those cases where the same two parties had more than one contract settled by arbitration, the average number of provisions settled by the second award did not vary significantly from the number settled by the first.

Table 4
Total and Arbitrated Hospital Settlement
by Size of Bargaining Unit,
August 1, 1965 - July 31, 1970

Size of Unit	(1) Total settlements	(2) Arbitrated settlements	(3) 2 as % of 1
All operating engineer's units	223	36	16
Units with less than 7 employees	148	21	14
Units with 7 or more employees	75	15	20
All other units	342	74	22
Units with less than 300 employees	281	53	19
Units with 300 or more employees	61	21	34

Table 5
Total and Arbitrated Hospital Settlements,
by First or Renewal Agreement,
August 1, 1965 - July 31, 1970

First or Renewal Agreement	(1) Total settlements	(2) Arbitrated settlements	(3) 2 as % of 1
First and Renewal	565	110	19
First	101	22	22
Renewal	464	88	19

Table 6
Average Number of Provisions per Award by First or
Renewal Agreement, Union and Years Ended
July 31, 1966-70¹

Type of Award	Average number of provisions
All awards	9.9
Renewal agreement	9.4
First agreement	11.9
I.U.O.E.	7.0
C.U.O.E.	9.0
S.E.I.U.	10.1
C.U.P.E.	10.5
1966	8.4
1967	9.7
1968	10.3
1969	10.0
1970	10.4

¹ Excludes four awards covering nurses' units and two covering service units as they were not in a form amenable for analysis.

Related clauses were considered as one provision. For example, the Sick Leave provision covers the number of credits granted, maximum accumulation of credits, and payment for unused credits upon termination of employment.

Table 7
Frequency of Various Contract Provisions
Determined by Arbitration Awards,
August 1, 1965 - July 31, 1970¹

Provision	Awards	
	Number	Per Cent
All Awards	93	100
Wages & Retroactive Pay	88	95
Paid Vacation	71	76
Paid Holidays	67	72
Sick Leave	65	70
Hours of Work and Overtime Pay	51	55
Union Security	46	49
Shift Premiums	44	47
Welfare Premiums	43	46
Uniforms and Clothing Allowance	31	33
Seniority	30	32
Grievance and Arbitration	21	23
Bereavement Leave	21	23
Leave of Absence	21	23
Job Classifications and Reclassification	19	20
Call-In Pay	17	18

¹ Excludes four awards covering nurses' units and two covering service units as they were not in a form amenable to analysis.

The major provisions of a contract were those most frequently settled by arbitration. Table 7 shows that seven of the eight provisions appearing in more than 40 per cent of the awards were monetary. Wage rates were an issue in almost every case and seem to be the primary reason prompting parties to resort to arbitration.

The extent of use of arbitration indicated in this study does not necessarily reflect the overall degree to which arbitration has influenced conditions of employment in hospitals. The awards, by providing parties with an impression of what they might expect to achieve by going to arbitration, may have influenced considerably the terms of voluntary settlements. The magnitude of this indirect effect is, of course, impossible to measure precisely, but some indication may be obtained from the data on wages presented later in the paper.

TIME REQUIRED TO SETTLE DISPUTES BY ARBITRATION

One of the major objections both employers and unions had to the imposition of compulsory arbitration was that it would result in protracted delays in settling contracts. This appears to have been the case. Table 8 shows it took an average of nearly nine months from the date of certification or expiration of the previous agreement to settle those disputes that were arbitrated¹. However, there was little consistency in the time required to achieve these settlements. Thirty-one per cent were concluded in less than seven months, while 15 per cent took twelve or more months. One dispute was resolved after only three months, while another required 22½ months. These variations were due in part to the type of agreement (first or renewal) being negotiated and the union involved as well as the year in which the dispute occurred.

¹ For the purpose of this study, a dispute was considered settled on the date the award was handed down. Although not shown in the table it usually required another one or two weeks following an award to draw up and sign a new agreement. In a small number of cases, the award was in dispute and a new agreement was not concluded until several months after the award was made.

Table 8
Duration of the Bargaining - Arbitration Process (in months) for
Disputes Settled by Arbitration Awards by First or Renewal
Agreement, Union, and Years Ended July 31, 1966-70

Type of award	From expiry date of previous agreement or certification date to award	From expiry date of previous agreement or certification date to conciliation officer assigned	From conciliation officer assigned to report of conciliation officer or board	From report of conciliation officer or board to award
	months	months	months	months
ALL AWARDS	8.8	1.5	1.7	5.6
Renewal agreement	8.5	1.1	1.7	5.7
First agreement	10.3	3.1	1.7	5.5
I.U.O.E.	9.0	1.7	2.7	4.6
C.U.O.E.	7.8	1.1	1.3	5.4
S.E.I.U.	8.1	1.3	1.8	5.0
C.U.P.E.	10.1	2.0	1.8	6.3
Nurses' Associations	11.1	1.7	1.9	7.5
Other Unions	9.5	1.4	1.2	6.9
1966	9.2	2.2	2.3	4.7
1967	9.4	2.5	2.0	4.9
1968	8.4	1.6	1.1	5.7
1969	8.4	1.0	1.4	6.0
1970	9.0	1.0	1.9	6.1

The difficulties frequently encountered in negotiating a first contract are reflected by the fact it took an average of nearly two months longer to settle disputes involving first as opposed to renewal agreements. However, this difference resulted almost entirely from the time spent in bargaining prior to arbitration rather than at arbitration itself.

The settlement of disputes that required arbitration appears to have been expedited by approximately one-half to one month during the two years between August 1967 and August 1969 compared to the other three years analyzed. This came about because the parties spent less time in pre-conciliation bargaining and in conciliation itself. Less time was required in conciliation because no boards were established for hospital disputes during or after 1967. Prior to then, conciliation boards were established in eight disputes that were eventually settled by arbitration. These boards extended the time required to achieve settlement by an average of nearly three months. The decline in the time spent prior to arbitration was partially offset by an increase of approximately one month in the time taken to complete the arbitration process.

Varying union policies and practices in relation to the bargaining, conciliation and arbitration processes appear to be a major cause of the large differences in the time required to conclude agreements. The C.U.O.E. contracts were settled an average of more than two months sooner than C.U.P.E. contracts and more than three months sooner than those involving nurses' associations. Equally surprising are the differences between the two unions representing operating engineers and between those representing other non-nursing employees. The C.U.O.E. locals spent a relatively short period of time in the bargaining and conciliation stages before going to arbitration. In contrast, the C.U.P.E. locals spent a relatively long period of time in the bargaining and conciliation stages prior to arbitration. The C.U.P.E. locals and nurses' associations were involved in arbitration an average of one month or more longer than the locals of the other three major unions in the hospital industry.

Why does it require nearly half a year to settle arbitrated disputes once the conciliation process has been completed? Table 9 presents an

analysis by year and union of the number of months spent in various stages of the arbitration process. It took an average of 2.3 months to establish a board. However, there were major differences in the time required to complete this initial stage of the arbitration process. It took one month or less in fifteen of the ninety-nine disputes and four or more months in eleven of them. These variations are explained in part by the union involved and the year in which the dispute occurred. Boards were established an average of approximately three to four weeks sooner in those disputes involving the I.U.O.E. and the S.E.I.U. than in those with the C.U.O.E., the C.U.P.E., and the nurses' associations. The time taken to establish a board increased during each of the last two years analyzed. This is somewhat surprising in view of changes in the Act designed to expedite this part of the arbitration process⁴.

Prior to May 1969 the Act stipulated that, before resorting to arbitration, the parties must continue bargaining for at least thirty-five days following conciliation. In May, 1969, an amendment to the Act reduced the thirty-five day period to seven days. That the parties took an average of 2.3 months to establish a board could indicate either they continued bargaining for a length of time appreciably longer than required by the legislation or they encountered difficulties in selecting board members and a chairman. In order to shed more light on this question data on the appointment of the union and hospital representatives were analyzed for sixty-three of the disputes for which this information was available.

⁴ The Hospital Labour Disputes Arbitration Amendment Act, 1968-69 passed in May of 1969 altered the Hospital Labour Disputes Arbitration Act, 1965 as follows:

s.4(1) Subject to subsection 2, if the parties have not made a collective agreement within seven (previously thirty-five) days after the day on which the Minister informed the parties or released the report as mentioned in section 3, the matters in dispute between them shall be decided by arbitration in accordance with this Act.

s.4(2) The parties by agreement in writing may extend the period of seven (previously thirty-five) days mentioned in subsection 1 for one or more further periods of time, not exceeding a total of thirty (previously ninety) days, and thereafter any further extension may be made only with the consent of the Minister.

s.5(1) Within seven days after the period of seven (previously thirty-five) days mentioned in section 4 and any extension thereof has elapsed, each of the parties shall appoint to a board of arbitration a member who has indicated his willingness to act.

Table 9
Time Required to Complete Various Stages of
the Arbitration Process (in months) by
Union and Years Ended July 31, 1966-70

Type of award	From report of conciliation officer or board to arbitration board established	From arbitration board established to first hearing	From first to last hearing	From last hearing to award
	months	months	months	months
ALL AWARDS	2.3	1.5	.2	1.6
I.U.O.E.	1.6	1.7	-	1.3
C.U.O.E.	2.7	1.5	-	1.2
S.E.I.U.	1.9	1.4	.1	1.6
C.U.P.E.	2.6	1.4	.4	1.9
Nurses' Associations	2.8	1.8	.6	2.3
Other Unions	2.9	1.3	-	2.7
1966	2.1	1.4	.2	1.0
1967	2.1	1.4	.1	1.3
1968	2.1	1.3	.1	2.2
1969	2.3	1.5	.5	1.7
1970	2.6	1.6	-	1.9

Apparently one major reason it took so long to establish a board was that in many cases the parties were not prepared to proceed to arbitration as soon as legally feasible. Prior to May 1969, the unions and hospitals took an average of thirty-two and forty-six days, respectively, to appoint their board members following conciliation. After May 1969, the time taken to appoint members decreased to twenty-six and thirty-four days for the unions and hospitals, respectively. Therefore, the change in the Act had an impact in reducing delays at this stage but it is evident that in many disputes the parties are still not initiating arbitration as quickly as possible. In some cases, the delays in the appointment of members were considerable. In fifteen of the sixty-three disputes analyzed, more than sixty days elapsed before both members were chosen. However, the delays in appointing members were not the only factor in prolonging the establishment of Boards.

Substantial delays were also encountered in selecting a board chairman. The Act provides that once the mandatory bargaining period has ended and both board members have been appointed, the members shall agree upon a chairman within ten days, or failing this, notify the Minister of Labour who will then appoint a chairman. The extent of the difficulties in selecting a chairman is revealed by the fact that the two members were able to agree on a chairman in only fifty-six of the ninety-nine disputes. Deliberations over the selection of a chairman were time consuming. In the thirty-six cases where information on this point was available, it took the members an average of twenty-four days to voluntarily agree on the chairman. In twenty-one of the cases in which the nominees were unable to agree upon a chairman an average of twenty-five days elapsed before they requested the Minister to appoint one.

The Minister also frequently had difficulty in selecting a chairman. Data on thirty-one of the forty-three disputes in which he was asked to do so show that an average of eleven days elapsed from when the request was received until the parties were notified who the chairman was to be. The difficulties encountered by both board members and the Minister are probably due, in part, to the fact that some potential chairmen became unacceptable to either or both parties after they had rendered one or more decisions.

Difficulties in arranging hearings and executive sessions at times convenient to all concerned appears to be another major reason for delays in completing the arbitration process. Once a board was established, an average of 1.5 months elapsed before the first hearing was held. An additional 1.6 months were required for executive meetings and the writing of the award. Delays in arranging the first hearing were fairly uniform. In only twenty-one disputes did the time required vary from the average by more than two weeks. However, there were large variations in the time taken to hold executive meetings and write the award following the hearings. In eighteen cases, the award was handed down within one week while in fifteen others it took three months or longer. The average time taken to complete this last stage increased substantially from the first two to the last three years. The reason for this development is not readily evident as the number of contract provisions in dispute did not vary significantly over the five years.

In most disputes the number of board hearings was not a major factor in extending the length of time taken to complete the arbitration process. The following tabulation indicates that only one hearing was held in 82 per cent of the cases⁵. In those instances where more than one hearing was required, the time lapse between each averaged three and one-half weeks.

Number of Board Hearings.	Number of Disputes.	Per Cent of Disputes.
1	81	82
2	14	14
3	4	4
	99	100

⁵ Hearings held on consecutive days were counted as one hearing.

In considering the time element associated with arbitration, it should be noted that difficult hospital disputes have always required a long time to resolve. The imposition of compulsory arbitration did not result in a large increase in the time required to settle them. From August 1963 to July 1965, thirty-four contracts were settled after the conciliation officer stage. An average of 4.7 months elapsed between the conciliation officer's report and the date of settlement.

However, settling hospital disputes by arbitration does take considerably more time than is required to resolve difficult disputes in industries where unions have the right to strike. During the first half of 1969, seventy-six legal non-construction strikes occurred. They ended an average of 3.3 months after the date of the conciliation officer's report.

In summary, it appears that significant delays occur at each stage of the arbitration process. Delays in the appointment of nominees have not been the major difficulty except in certain cases. Problems created by delays in the selection of chairmen, arranging hearings and executive sessions, and writing the awards are all more important.

The significance of delays in achieving a settlement becomes apparent when the duration of the new contract is considered. Most awards stipulated the agreement would be for a term of at least one year from the date of its execution rather than from the expiration of the previous agreement or the date the hospital received the union's notice of desire of bargaining following certification. Consequently, the unions were forced to accept contract terms that were binding for a period of time considerably longer than one year.

IMPACT OF ARBITRATION ON WAGE STRUCTURE

This section of the paper deals with the impact of arbitration on the results rather than the procedures of collective bargaining in hospitals. It is possible that the introduction of arbitration as a method of determining terms of employment in the hospital industry could have resulted in a narrowing of differences in wages and working conditions among hospitals. Arbitration might also have

produced a change in the relationship of hospital wages and working conditions to those in other industries generally. In attempting to delineate the impact of arbitration on hospital wages the subsequent analysis compares wage rate differentials among hospitals and between hospitals and other industries for the period October 1963 to October 1969⁶. However, before examining the wage rate data, a background for the comparisons is provided by a review of the concepts and criteria that may have been used in determining arbitrated wage increases.

Concepts and Criteria Used in Arbitration

The Hospital Labour Disputes Arbitration Act provided little, if any, guidance for arbitral decision-making. Consequently, the arbitrators were forced to "create a body of law governing the process of compulsory arbitration which furnishes some coherence and objectivity to the workings of the many individual boards"⁷.

This "body of law" was first fully developed and enunciated in the November 1965 Welland County General Hospital award. The board, chaired by Professor H.W. Arthurs, reached the following conclusions:

1. Arbitration boards should adjudicate, rather than adjust, the differences between the parties by applying evidence to pre-determined and rational standards.
2. Arbitration is intended to alter the procedure, and not the end product, of collective bargaining. Therefore, arbitration awards should approximate, as closely as possible, those results which would have been produced by free collective bargaining.

⁶ Although not attempted in this study, it would also be necessary to analyze fringe benefit changes in order to have a complete understanding of whether or not arbitration produced significant changes in terms of employment among hospitals and between hospitals and other industries generally.

⁷ Guelph General Hospital Award, 1969, p.3.

3. Arbitration is a substitute for the strike and should therefore be an exercise in discovering labour market realities. Therefore, it is to relevant wage⁸ comparisons that boards must look, rather than abstract notions of justice or questions of high policy in hospital administration.

The board developed a set of relevant labour market criteria relating solely to wages. These were divided into three groups, each to be given separate weight in arriving at a decision. The most important group of comparative factors was as follows:

- wages paid in “comparable hospitals”, that is, those of a similar type situated in communities having a similar cost-of-living and average wage level;
- trends in cost-of-living and average wages in the locality of the hospital;
- trends in comparable hospitals.

Less weight was given to factors in the second group:

- difficulties encountered by the hospital in recruiting and holding a staff;
- trends in non-comparable hospitals and in non-hospital occupations, where deserving of special consideration;
- trends in hospital wages generally.

Little weight was given to factors in the third group:

- wage levels in non-comparable hospitals;

⁸ The wage issue was the only one this board dealt with. However, this principle was equally applicable to matters other than wages.

- wage levels in non-hospital occupations, where there was not substantial identity of working conditions;
- abstract appeals to “justice”.

During 1966, 1967, and 1968, it appears that most arbitration boards adopted this framework as the basis for their decisions. The emphasis in this approach was to duplicate the result of pre-statute collective bargaining by measuring wages and working conditions through external comparisons with other “comparable” hospitals whose contracts were not settled by arbitration.

By early 1969, several arbitration boards began to question the criteria developed in the 1965 Welland County General Hospital award as shown by the following excerpts from several awards.

“After a time the arbitration decisions themselves became a major factor determining the kinds of settlements which will be agreed to. With the relative uncertainty of a strike replaced by more predictable patterns in arbitration awards, the level of private agreement will tend to reflect the trends in the awards. If this is the case, one completes the vicious circle if the awards are themselves justified by patterns of wages arrived at by settlement. It is no longer possible as it was in the earlier decisions to extrapolate from the status quo before the Act. Arbitrators must begin to have reference to negotiations outside hospitals which are truly free of the distorting effects of compulsory arbitration”⁹.

“We agree that the first group of factors should command the greatest weight in our determination. However, in our opinion, over the last several years the changing climate of industrial relations has increased the importance of external comparisons with wages and other benefits in the whole range of jobs labelled ‘non-comparable’ in the Welland County General Hospital Award”¹⁰.

⁹ Peel Memorial Hospital Award, 1969, p.3.

¹⁰ Ottawa Civic Hospital Award, 1969, p.4.

"The difference this board holds with the hospital's position initially centres on their view of 'comparable'. We agree ... that the relevance of figures from 'non-comparable' hospitals should be upgraded. To this board the argument of the hospitals seems to imply that once parity has been reached with 'comparable' hospitals, as defined by them, the basic issue of wages is settled, the Consumer Price Index giving it an occasional jog. Such surely cannot be true. Again, from what can only be minor degrees of difference in working conditions, mental and chronic hospitals are basically removed from consideration by their argument. In the opinion of the board such differences in working conditions are overstressed. As well, where the various levels of government support both types of institutions, it appears both should be treated in an almost equal manner."

"The major difficulty the board finds with the position of the hospitals relates to 'abstract appeals to justice'. While the board can accept that an appeal to justice without support as to what constitutes justice cannot be given weight, where demonstrable evidence of the employee's economic position in society is shown, it is our opinion this must be given weight. Given the statutory limitation on the employee's right to strike, we cannot accept the position that the task of this board of arbitration is to merely consider the position of the workers involved vis-à-vis similar workers, irrespective of their general economic position ... In our opinion, it is intolerable that workers in such a segment of our public service be kept at the present level"¹¹.

The awards just quoted seem to indicate there may be a trend developing towards placing more emphasis on those comparative factors in the second and third groups as defined in the Welland County General Hospital award. If this is the case, a change in criteria would mean that wage movements in the past, as analyzed in this paper, may not be a good indication of what might happen in the future.

Another qualification that must be made in interpreting the wage data in this study is that little is known about how closely the awards

¹¹ Hamilton Civic Hospitals Award, 1969, p.5.

follow the stated criteria. Not only are the criteria sufficiently broad to permit a variety of interpretations but also, they may not be utilized as the arbitration process on occasions may be, in part, one of quasi-mediation both at the hearings and in the executive sessions of the tripartite boards. To the extent that quasi-mediation occurs, the criteria noted above would have less influence in determining hospital wages and working conditions.

Wage Differentials Among Hospitals

The previous section has indicated that wage levels and wage increases in "comparable" hospitals are two of the main criteria used in arbitration. A widespread application of these criteria in arbitration and the influence they had on voluntary settlements could have lead either to the maintenance or narrowing of hospital wage rate differentials in absolute terms¹². If arbitrators placed more emphasis on granting wage increases that matched the increases at comparable hospitals, differentials would have remained relatively constant between 1965 and 1969. On the other hand, differentials should have narrowed if arbitrators awarded wage increases that brought about greater uniformity of wage rate levels.

Another factor that would influence the behaviour of differentials is the number and the location of the hospitals used for comparative purposes. If arbitrators used a relatively large number of hospitals throughout the province for comparative purposes, one might expect a gradual narrowing of existing differentials between economic regions or major cities. However, if they restricted their comparisons to hospitals within a fairly limited geographical area, differentials would have narrowed only within economic regions or major cities.

In order to determine the actual behaviour of wage differentials within the organized sector of the hospital industry, information was gathered on maximum collective agreement rates paid to housekeeping maids, porter-cleaners and third class stationary engineers. These

¹² It is assumed that once a set of comparable hospitals were defined, the primary basis for the wage award was a rough average of the wage increases and/or wage levels at those comparable hospitals.

occupations were chosen for two reasons. First, the maids and porter-cleaners represent relatively large groups of female and male employees at the low end of the hospital wage scale while the third class engineers represent employees at the high end of the wage scale. The second reason was that movements in these rates were fairly representative of wage changes for most other hospital occupations covering large groups of employees¹³. Salaries paid to registered nurses were not included in the analysis because of the small number of nurses' contracts in existence during the period under review.

Unless otherwise specified, the wage comparisons include rates at all hospitals (regardless of type or function) that had union contracts as of October 1 of each year from 1963 to 1969. All wage data are expressed in terms of hourly rates. Monthly or bi-weekly contract rates were converted by dividing these rates by the appropriate number of hours worked (exclusive of mealtimes). In reporting wage rates in the tables, simple rather than employee weighted averages are used. Two measures of wage dispersion are used, the range and standard deviation. The range is the difference between the highest and lowest contract wage rate under consideration. In contrast, the standard deviation describes the degree of dispersion of all wage rates about their mean. The larger the standard deviation, the larger the degree of dispersion.

¹³ This conclusion is based on an analysis of wage increases between October 1965 and October 1969 in twenty-seven bargaining units which indicates:

A. The wage increases granted to nurses' aides, female laundry helpers, seamstresses and female kitchen helpers over the four year period varied by an average of only .1, .1, .2 and 1.1 cents per hour, respectively, from the wage increases granted to housekeeping maids. The only large groups of females that received increases significantly larger than maids were in the nursing department. Wage gains for registered nursing assistants and non-registered nursing assistants exceeded those for maids by an average of 15.2 and 6.6 cents per hour, respectively.

B. The wage increases granted to male kitchen helpers and laundry washmen over the four year period exceeded the increases for porter-cleaners by an average of only .8 and 1.1 cents per hour respectively. As was the case among female employees, the only large group of non-maintenance male employees to gain increases substantially larger than porter-cleaners worked in the nursing department. Increases for orderlies averaged 4.5 cents per hour more than for porter-cleaners.

As the wage analysis is rather lengthy and involved, only a brief summary of it is presented in the body of the report. Those wishing to study the wage change data in more detail may refer to Appendix A.

Wage Differentials Between Economic Regions: For each year and occupation under review, the average collective agreement rate in an economic region was calculated. The inter-regional dispersion of such average wage rates is reported in Table 10. The analysis indicates that the inter-regional wage rate differentials for porter-cleaners, maids and engineers have not narrowed since the advent of arbitration. In the case of porter-cleaners, the dispersion has approximately doubled. However, no significant long-term change occurred in the dispersion of rates for maids or third class engineers, although there were substantial year to year fluctuations.

Wage Differentials Between Major Cities: For each year and occupation, the average contract rate in five cities was calculated. The trend in the inter-city dispersion of these average rates is reported in Table 11. The behaviour of inter-city wage rate differentials was very similar to that of inter-regional differentials. Again, there was no trend towards either a narrowing or widening of inter-city differentials for maids or third class engineers over the five years from the imposition of arbitration, although there were major year to year fluctuations. The dispersion of average rates for porter-cleaners more than tripled over the same period.

Wage Differentials Within Economic Regions: To determine how the wage structure within economic regions has behaved, the dispersion of contract wage rates within each economic region was calculated. These measures of dispersion were then averaged across all economic regions. The results are reported in Table 12. Again, the impact of arbitration appears minimal. Since 1965, wage rate differentials within regions have generally increased for maids and porter-cleaners, but have remained relatively constant for third class engineers.

Wage Differentials Within Major Cities: To measure developments in the intra-city wage structure, the dispersion of contract wage rates within each of five cities was calculated. The measures of dispersion

were then averaged across these cities. The results are reported in Table 13. As was the case for inter-city comparisons, intra-city differentials fluctuated from year to year but no long-term increase or decrease in the wage dispersion for any of the three occupations occurred following the introduction of hospital arbitration. An analysis of the differentials between only the public general hospitals within cities also reveals that there was no trend towards a decrease or increase in these differentials after 1965.

In order to determine whether arbitration was responsible for the sometimes substantial year to year fluctuations in differentials, a detailed analysis of such changes was undertaken. As reported in the appendix, arbitration was not a significant cause of these changes.

The data in Tables 10 to 13 indicate that no trend towards greater uniformity of wage rates or greater uniformity of year to year wage increases developed following the advent of arbitration. This latter finding is undoubtedly related to the fact that there is considerable variation in the size of wage increases contained in the arbitration awards (see Tables 14 and 15). Some upward movement in the level of arbitrated wage increases is evident. However, there has continued to be substantial differences between awards. This suggests that the trend in hospital industry wage rates is more the product of general developments in labour markets in the period under review rather than a well-defined "whip-sawing" pattern among the awards. In other words it would appear that arbitrators did not place great emphasis on wage increases granted by previous awards.

In summary, the wage analysis revealed that arbitration has not led to a narrowing of wage rate differentials between economic regions, between major cities, within economic regions or within major cities. This seems to indicate that in applying the "comparable" hospital criteria, arbitrators placed more emphasis on granting wage increases that matched the increases at comparable hospitals rather than granting increases that would result in more uniform wage levels. Intentionally or not, awards and voluntary settlements since 1965 have resulted in the maintenance or widening of wage rate differentials compared to those that existed prior to arbitration.

Table 10

**Dispersion of Regional Average Hourly Wage Rates
(in dollars) for Housekeeping Maids, Porter-Cleaners
and Third Class Engineers, October 1, 1963 - 69**

Occupation		1963	1964	1965	1966	1967	1968	1969
Maids	r †	.19	.22	.22	.26	.35	.19	.20
	s.d. #	.055	.068	.069	.079	.108	.074	.074
Porter-Cleaners	r	.13	.20	.21	.34	.43	.44	.45
	s.d.	.043	.059	.059	.089	.116	.103	.110
Engineers	r	.54	.62	.68	.56	.57	.40	.55
	s.d.	.163	.175	.185	.157	.161	.134	.170

† r = range

s.d. = standard deviation

Table 11

**Dispersion of Major City¹ Average Hourly Wage Rates
(in dollars) for Housekeeping Maids, Porter-Cleaners
and Third Class Engineers, October 1, 1963 - 69**

Occupation		1963	1964	1965	1966	1967	1968	1969
Maids	r †	.15	.16	.20	.18	.24	.08	.15
	s.d. #	.056	.063	.075	.064	.084	.030	.048
Porter-Cleaners	r	.14	.14	.15	.27	.44	.44	.52
	s.d.	.052	.053	.053	.097	.147	.165	.192
Engineers	r	.42	.40	.46	.51	.37	.30	.45
	s.d.	.153	.150	.167	.179	.137	.104	.160

¹ Major cities are those having a population of 150,000 or more and include Hamilton, London, Ottawa, Toronto and Windsor.

† r = range

s.d. = standard deviation

Table 12

**Mean Dispersion of Hourly Wage Rates (in dollars)
within Economic Regions for Housekeeping Maids,
Porter-Cleaners and Third Class Engineers,
October 1, 1963-69**

Occupation		1963	1964	1965	1966	1967	1968	1969
Maids	r †	.20	.23	.21	.25	.28	.31	.31
	s.d. #	.067	.076	.074	.086	.093	.093	.095
Porter-Cleaners	r	.27	.29	.30	.32	.39	.38	.39
	s.d.	.094	.094	.091	.102	.127	.120	.124
Engineers	r	.34	.35	.33	.32	.30	.30	.32
	s.d.	.125	.119	.115	.114	.104	.106	.107

† r = range

s.d. = standard deviation

Table 13

**Mean Dispersion of Hourly Wage Rates (in dollars)
within Major Cities¹ for Housekeeping Maids,
Porter-Cleaners and Third Class Engineers,
October 1, 1963 - 69**

Occupation		1963	1964	1965	1966	1967	1968	1969
Maids	r †	.12	.18	.12	.15	.15	.14	.15
	s.d. #	.043	.065	.043	.053	.053	.049	.051
Porter-Cleaners	r	.16	.23	.20	.21	.25	.21	.24
	s.d.	.065	.082	.068	.075	.090	.075	.082
Engineers	r	.17	.18	.12	.15	.14	.17	.19
	s.d.	.058	.054	.042	.050	.048	.059	.068

¹ Major cities are those with three or more hospitals having union contracts and include Hamilton, Kitchener (engineers only), London (maids and cleaners only), Ottawa, Thunder Bay, Toronto and Windsor.

† r = range

s.d. = standard deviation

Table 14

Hourly Wage Increases for Porter-Cleaners Granted by Arbitration Awards, August 1, 1965 - July 31, 1970¹

Award	Award Date	Term of Wage Increase in Months	Total Wage Increase Cents	Per Cent	Wage Increase Per Year Cents	Per Cent
Victoria - London v. S.E.I.U.	Oct. 12, 1965	21.0	12	8.0	7.0	4.5
Brantford General v. S.E.I.U.	Nov. 8, 1965	22.0	11	7.5	6.0	4.0
Hamilton Health Assn. v. C.U.P.E.	Nov. 15, 1965	20.0	13	10.0	8.0	6.0
Welland County General v. S.E.I.U.	Nov. 30, 1965	20.0	21	15.5	13.0	9.5
St. John's Convalescent - Toronto v. C.U.P.E.	Dec. 10, 1965	20.0	15	20.0	9.0	6.5
Riverdale - Toronto v. C.U.P.E.	July 18, 1966	19.0	19	10.5	12.0	6.5
La Verendrye - Fort Frances v. C.U.P.E.	Oct. 31, 1966	35.0	22	16.0	7.5	5.5
Parkwood - London v. S.E.I.U.	Feb. 10, 1967	19.0	18	12.0	11.5	7.5
Victoria - London v. S.E.I.U.	Mar. 27, 1967	24.0	30	18.5	15.0	9.5
Trenton Memorial v. S.E.I.U.	June 6, 1967	24.0	25	17.5	12.5	9.0
Wellesley - Toronto v. S.E.I.U.	June 26, 1967	27.0	40	26.0	18.0	11.5
St. Peter's Infirmary - Hamilton v. C.U.P.E.	Oct. 14, 1967	18.5	37	22.0	24.0	14.5
St. Vincent - Ottawa v. Serv. Empl. Syndicate	Dec. 15, 1967	30.0	35	20.0	14.0	8.0
Ottawa General v. Serv. Empl. Syndicate	Dec. 15, 1967	30.0	38	21.0	15.0	8.0
Milton District Hospital v. C.U.P.E.	Dec. 29, 1967	18.5	40	28.5	26.0	18.5
St. Thomas - Elgin General v. S.E.I.U.	Apr. 8, 1968	15.0	22	13.0	17.5	10.5
Woodstock General v. S.E.I.U.	Apr. 17, 1968	14.0	26	15.0	22.5	13.0
St. Joseph's - Hamilton v. C.U.P.E.	Oct. 22, 1968	24.0	19	10.0	9.5	5.0
York County - Newmarket v. S.E.I.U.	Feb. 24, 1969	20.0	43	25.5	30.0	15.5
Stratford General v. C.U.P.E.	Mar. 6, 1969	24.0	27	16.0	13.5	8.0
Peel Memorial - Brampton v. S.E.I.U.	Mar. 15, 1969	18.0	48	28.0	32.0	18.5
Sarnia General v. S.E.I.U.	Apr. 1, 1969	18.0	14	7.0	9.5	4.5
Hamilton Civic v. C.U.P.E.	July 25, 1969	22.5	39	20.0	21.0	10.7
Freeport Sanitorium - Kitchener v. S.E.I.U.	July 31, 1969	12.0	33	20.5	33.0	20.5
New Mount Sinai - Toronto v. S.E.I.U.	Sept. 25, 1969	24.0	37	19.0	18.5	9.5
Belleville General v. S.E.I.U.	Oct. 20, 1969	24.0	44	26.0	22.0	13.0
Riverdale - Toronto v. C.U.P.E.	Oct. 28, 1969	22.0	28	12.5	15.0	7.0
West Haldimand General - Hagersville v. S.E.I.U.	Nov. 13, 1969	23.0	49	30.5	26.0	16.0
South Waterloo Memorial - Galt v. S.E.I.U.	Nov. 26, 1969	24.0	30	15.0	15.0	7.5
Brockville General v. C.U.P.E.	Dec. 3, 1969	20.0	33	17.5	15.0	10.5
Trenton Memorial v. S.E.I.U.	Dec. 3, 1969	23.0	64	36.0	33.5	19.0
Milton District v. C.U.P.E.	Dec. 16, 1969	23.0	38	21.0	20.0	11.0
Metropolitan General - Windsor v. S.E.I.U.	Dec. 19, 1969	12.0	21	8.5	21.0	8.5
Hamilton Health Assn. v. C.U.P.E.	Dec. 23, 1969	26.0	39	20.0	18.0	9.0
St. Joseph's - Windsor v. S.E.I.U.	Jan. 13, 1970	12.0	22	9.0	22.0	9.0
Ongwanda - Kingston v. C.U.P.E.	Jan. 17, 1970	21.5	53	32.0	29.5	18.0
Ottawa General v. Serv. Empl. Syndicate	Apr. 15, 1970	18.0	28	13.0	19.0	8.5
Toronto General v. S.E.I.U.	June 3, 1970	17.0	33	15.5	23.5	11.0

¹Awards finalizing first agreements are excluded.²Includes period for which retroactive wage payments were made

Table 15
Hourly Wage Increases for Third Class Engineers Granted
by Arbitration Awards, August 1, 1965 - July 31, 1970¹

Award	Award Date	Term of Wage Increase in Months. ²	Total Wage Increase Cents	Wage Increase Per Cent	Wage Increase Per Year Per Cent
Wellesley - Toronto v. I.U.O.E.	Aug. 6, 1965	25.0	17	6.5	8.0
Victoria - London v. S.E.I.U.	Oct. 12, 1965	21.0	24	10.0	13.5
Riverdale - Toronto v. C.U.O.E.	Jan. 28, 1966	15.0	10	4.0	8.0
Grace - Toronto v. C.U.O.E.	June 17, 1966	18.5	15	5.5	9.5
Kitchener - Waterloo v. C.O.U.E.	June 20, 1966	24.0	35	15.5	17.5
La Verendrye - Fort Frances v. C.U.P.E.	Oct. 31, 1966	35.0	43	19.0	13.5
Parkwood - London v. S.E.I.U.	Feb. 10, 1967	19.0	27	11.5	17.0
Wellesley - Toronto v. I.U.O.E.	Mar. 6, 1967	24.0	33	12.0	16.5
Victoria - London v. S.E.I.U.	Mar. 27, 1967	24.0	44	17.0	22.0
Oshawa General v. C.U.O.E.	Dec. 22, 1967	16.0	18	6.5	13.5
St. Thomas - Elgin General v. S.E.I.U.	Apr. 8, 1968	15.0	32	11.5	25.5
I.O.D.E., Hotel Dieu, Metropolitan, and Grace - Windsor v. C.U.O.E.	Apr. 15, 1968	20.0	30	10.0	18.0
Chatham Public General v. C.U.O.E.	May 30, 1968	23.0	19	6.5	10.0
St. Joseph's - Hamilton v. C.U.P.E.	Oct. 22, 1968	24.0	30	10.0	15.0
Fort William Sanitorium v. I.U.O.E.	Nov. 4, 1968	23.0	60	25.0	31.0
Queensway - Toronto v. C.U.O.E.	Feb. 10, 1969	18.0	40	14.0	26.5
York County - Newmarket v. S.E.I.U.	Feb. 24, 1969	20.0	35	13.0	21.0
Stratford General v. S.E.I.U.	Mar. 6, 1969	24.0	50	19.0	25.0
Sarnia General v. S.E.I.U.	Mar. 1, 1969	18.0	27	9.0	18.0
Oshawa General v. C.U.O.E.	May 5, 1969	12.0	27	9.0	27.0
Riverdale - Toronto v. C.U.O.E.	June 30, 1969	15.0	23	7.5	18.5
Homewood Sanitorium - Guelph v. C.U.O.E.	Aug. 28, 1969	24.0	41	14.0	20.5
St. Joseph's - Guelph v. C.U.O.E.	Sept. 2, 1969	24.0	43	15.0	21.5
Bowmanville Memorial v. C.U.O.E.	Nov. 4, 1969	22.5	51	19.0	27.0
Brockville General v. C.U.P.E.	Dec. 3, 1969	20.0	48	16.5	29.0
Chatham Public General v. C.U.O.E.	Dec. 9, 1969	18.0	35	11.0	23.5
York Central - Toronto v. C.U.O.E.	Dec. 16, 1969	23.5	59	19.5	30.0
General, St. Joseph's, and McKellar - Thunder Bay v. I.U.O.E.	May 14, 1970	12.0	25	8.5	25.0
St. Mary's General - Kitchener v. C.U.O.E.	May 27, 1970	24.0	49	16.5	24.5

¹Awards finalizing first agreements are excluded.

²Includes period for which retroactive wage payments were made.

Wage Differentials Between Hospitals and General Industry

The previous wage analysis concentrated on determining if and how arbitration has affected the wage structure within the organized sector of the hospital industry. The unions representing hospital employees are equally or perhaps more concerned with the relationship between hospital and non-hospital wages. They contend that since the advent of arbitration hospital wage increases have lagged behind those in other industries generally. In this section, hospital rates are compared with non-hospital rates in order to determine if arbitration and the absence of the right to strike have had a positive or negative effect on hospital wage increases relative to those in other industries.

There is no apparent reason why arbitration should have either of these effects. In the stated criteria for arbitral decision making, changes in the cost-of-living and average wage levels in the locality of a hospital were given consideration equal to wage rates and wage increases in comparable hospitals. Therefore, it would seem likely that differentials between hospital rates and comparable rates in general industry would have remained fairly constant in the long run.

Hospital wage increases will appear relatively large or small depending upon the non-hospital occupations and industries used for comparative purposes. The most relevant comparison would involve identical occupations in a local labour market. However, occupations which are highly comparable to those in the hospital industry are not common throughout most other industries. Because of this, two distinct types of non-hospital occupations are used. Hospital rates are first analyzed in relation to those for a roughly comparable occupation common to many other industries. Porter-cleaners are compared to general labourers, third class engineers to non-hospital third class engineers, and housekeeping maids to a group of selected occupations in various industries. Hospital rates are then studied in relation to those for a highly comparable occupation in the hotel industry. Housekeeping maids are compared to chamber maids, porter-cleaners to housemen, and third-class engineers to third class engineers. Wage data for the non-hospital occupations were obtained from the survey

of Wage Rates, Salaries and Hours of Labour published annually by the Economics and Research Branch of the Canada Department of Labour. The wage data therein refer to employee weighted straight time average wage rates. As previously noted, the hospital wage data are unweighted averages of maximum contract rates.

The comparison of hospital rates in relation to those for roughly comparable occupations in other industries seems to indicate that arbitration has not resulted in a pronounced change in the ability of hospital workers to win wage increases comparable to those won in other industries. Table 16 indicates that for the twenty-three cities examined, the average differential, in absolute terms, between porter-cleaners and labourers in general industry has remained fairly constant. The porter-cleaners were paid approximately fifty cents per hour less throughout most of the period under review. Although the average differential increased by five cents per hour during 1966, it decreased during the next three years to a level seven cents per hour below that which existed prior to arbitration. In the case of third class engineers, the average differential has also remained relatively stable over the period (see Table 17). The exceptions were 1966 when the differential in favour of non-hospital engineers widened by five cents per hour and 1969 when it decreased by four cents per hour. In some cities hospital engineers have been paid more than engineers in other industries.

A more detailed examination of the data in Tables 16 and 17 shows that although the average differential remained fairly constant over the six year period, the experience varied considerably between individual cities. The differential in most cities fluctuated considerably from year to year while over the long run, it increased in some (first group in tables) and decreased in others (second group). In a large number of cities (third group), there was no apparent long term change in the differential.

Arbitration did not play an important role in the year to year fluctuations of the differentials in cities. The eighty-seven instances in which differentials varied by eight cents or more from the previous year are marked by asterisks on the tables. Arbitrated increases were responsible for the difference being eight or more cents in only six of

Table 16

**Hourly Wage Differentials (in dollars) Between
Porter-Cleaners Employed in Hospitals and Labourers in
Other Industries
by City, October 1, 1963 - 69¹**

City	1963	1964	1965	1966	1967	1968	1969
Widening Differential							
Sarnia	.56	.54	.58	.77*	.72	.73	.78
Sault Ste. Marie	.50	.43	.45	.60*	.60	.64	.56*
Thunder Bay	.68	.68	.59	.73*	.74	.72	.75
Ottawa	.09	.04	.14	.23*	.20	.14	.21
London	.42	.38	.41	.49**	.54	.45*	.50
St. Catharines	.61	.63	.70	.72	.73	.74	.67
Narrowing Differential							
Oshawa	.92	.96	.97	.96	.84*	.67*	.71
Woodstock	.39	.38	.45	.35*	.34	.08*	.41*
Windsor	.61	.64	.69	.65	.42*	.33*	.36
Sudbury	.95	.95	.80	.90*	.78*	.73	.54*
Hamilton	.52	.55	.52	.56	.38*	.46**	.43
Brantford	.39	.41	.38	.32	.29	.32	.27
Belleville	.52	.52	.63	.55*	.42*	.44	.36**
Approximately Constant Differential							
Kingston	.32	.37	.44	.33*	.43*	.50	.37*
Welland	.56	.71	.56	.71*	.61*	.53*	.43*
Peterborough	.34	.39	.30	.32	.26	.34*	.30
Cornwall	.49	.44	.56	.59	.51*	.50	.49
Toronto	.43	.33	.41	.43	.42	.41	.39
Galt	.23	.32	.29	.38*	.38	.12*	.14
Guelph	.40	.39	.42	.52*	.50	.21*	.27
Niagara Falls	.51	.56	.53	.68*	.67	.42*	.41
Kitchener	.48	.51	-	.61	.59	.50*	.43
St. Thomas	.30	.33	.35	.39	.21*	.28	.41*
Mean	.49	.50	.51	.56	.50	.45	.44

¹ Amount by which the average rate for labourers exceeded that for porter-cleaners. Average rate for labourers in each city was obtained from the survey of Wage Rates, Salaries and Hours of Labour published annually by the Economics and Research Branch of the Canada Department of Labour.

* Differential changed by eight or more cents from preceding year. Arbitrated increases were not responsible for the change being eight or more cents.

** Differential changed by eight or more cents from the preceding year. Arbitrated increases were responsible for the change being eight or more cents.

Table 17

**Hourly Wage Differentials (in dollars) between Third Class
Engineers Employed in Hospitals and Those in Other
Industries by City, October 1, 1963 - 69¹**

City	1963	1964	1965	1966	1967	1968	1969
Widening Differential							
Sarnia	.58	.51	.52	.80*	.71*	.75	.63*
Windsor	.06	.08	.06	.10	.13	.40*	.29**
Sudbury	.07	.04	.05	.38*	.37	.16*	.02*
Sault Ste. Marie	-	.16	.22	.39*	.44	.39	.21
Thunder Bay	.18	.17	.16	.20	.41*	.21*	.31*
Toronto	-.04	-.07	.01	.02	.03	.09	.13
St. Catharines	.07	-.02	.02	.09*	.22*	.14*	.19
Chatham	.04	-.09	-.08	-.01	-.01	.09**	.14
Guelph	-.20	-.19	-.09	-.03	-.16*	-.11	-.06
Niagara Falls	.15	.04	-.03	-.09	.01*	.07	.06
Narrowing Differential							
Woodstock	.31	.28	.18	.06*	.10	-.23*	-.12*
St. Thomas	.09	.00	-.02	.08*	-.06*	-.10	-.09
Approximately Constant Differential							
Kitchener	.02	-.10	.07	-.01**	.10*	.05	.22*
Welland	.25	.25	.22	.21	.23	.27	.03*
Peterborough	-.10	-.11	-.11	-.10	-.10	-.15	-.07*
Cornwall	.33	.32	.17	.54*	.23*	.30	.14*
Hamilton	.26	.16	.20	.31*	.10*	.15	.20
Kingston	.22	.17	.17	.20	.10*	.19*	.09*
London	.03	.00	.03	.05	.06	-.08*	-.06
Ottawa	-.04	-.05	.07	.04	.07	-.06*	-.08
Brantford	.08	.10	.16	.06*	.08	.29*	.06*
Oshawa	.23	.23	.18	.08*	.04	.46*	.53
Galt	.02	.03	.12	-.01*	.08*	.18*	-.08*
Mean	.12	.08	.10	.15	.14	.15	.11

¹ Amount by which the average rate for non-hospital engineers exceeded that for hospital engineers. Average rate for non-hospital engineers in each city was obtained from the survey of Wage Rates, Salaries and Hours of Labour published annually by the Economics and Research Branch of Canada Department of Labour.

* See Table 16.

** See Table 16.

these cases. In fact, most large changes in differentials were the result of developments outside the hospital industry.

The analysis of wage increases for housekeeping maids differs from that for the porter-cleaners and engineers as data on female labour rates in general industry were not available on a city basis. In order to overcome this problem, an average female labour rate was computed based on the occupations and industries listed in Appendix B. The following tabulation shows the amount by which this average female labour rate exceeded the mean regional rate for housekeeping maids (see Table A-1 in Appendix A) for each year since 1963.

	Year (October 1)						
	<u>1963</u>	<u>1964</u>	<u>1965</u>	<u>1966</u>	<u>1967</u>	<u>1968</u>	<u>1969</u>
<u>Differential</u>	.11	.13	.13	.13	.13	.09	.06

The differential remained constant throughout most of the period but declined by seven cents per hour during the last two years to a level only half as large as existed prior to arbitration.

When hospital rates are studied in relation to those for highly comparable occupations found in the hotel industry, it appears hospital employees have won relatively large increases between 1963 and 1969. The following tabulation shows the amount by which the mean regional rate for hospital maids, porter-cleaners and third class engineers (see Tables A-1, A-2 and A-3 in Appendix A) exceeds the average rate in Ontario for hotel chambermaids, housemen and third class engineers, respectively¹⁴.

<u>Differential</u>	Year (October 1)						
	<u>1963</u>	<u>1964</u>	<u>1965</u>	<u>1966</u>	<u>1967</u>	<u>1968</u>	<u>1969</u>
Maids- Chambermaids	.12	.10	.14	.18	.22	.33	.39
Cleaners- Housemen	.11	.11	.18	.25	.28	.41	.50
Engineers- Engineers	-.21	-.17	-.09	.02	-.04	-.02	.02

¹⁴ The survey of Wage Rates, Salaries and Hours of Labour provides separate wage data for hotels having 200 or more employees and for those having less than 200 employees. In this calculation, a simple average of these two types of rates was used.

In 1963, both maids and porter-cleaners were paid rates higher than their counterparts in hotels, and the differential has increased steadily since then. On the other hand, hospital third class engineers were paid less than hotel third class engineers. However, the differential had been eliminated by 1969.

The results of the analysis in this section suggest that it is difficult to assign any direct or even indirect role to arbitration in changing the relationship of wages in hospitals to those in general industry. Between 1963 and 1969, most hospital employees obtained wage increases that matched or slightly exceeded the average increases won by employees in roughly comparable occupations in other industries. Also, it appears that during the same period hospital increases were substantially larger than those for highly comparable non-hospital occupations in the hotel industry.

APPENDIX A

WAGE DIFFERENTIALS AMONG HOSPITALS

This appendix presents the basic wage data used in the analysis of wage differentials that is summarized in the text. It also extends the analysis by considering in detail the role of arbitration in causing major year to year changes in differentials.

Wage Differentials Between Economic Regions

The inter-regional wage rate differentials for the three occupations under review have not narrowed since the advent of arbitration (see Tables A-1, A-2 and A-3). In the case of porter-cleaners, the dispersion has approximately doubled. However, no significant long-term change occurred in the dispersion of rates for maids or engineers, although there were substantial year to year fluctuations.

To analyze the underlying cause of the changes in inter-regional differentials, the annual increases in regional average wage rates between October 1963 and October 1969 were computed (see Tables A-4, A-5 and A-6). This information must be considered in the light of the fact that differentials widen (narrow) when the average increase in a low wage region is relatively small (large) or when the average increase in a high wage region is relatively large (small). The thirty-five instances in which the average increase in a region differed by five or more cents from the all regions average are marked with asterisks in the three tables. A detailed analysis of the data determined that arbitrated increases were responsible for the difference being five or more cents in only seven of these cases (two asterisks). In no instance were these seven cases more important than voluntarily determined wage increases in producing either a widening or narrowing of the overall inter-regional wage structure from one year to the next.

Although the increases in average wage rates in any one year varied considerably between regions over the six year period, the total

increases in most regions were very similar. There were a number of exceptions. The long-term increase in the dispersion of wage rates for porter-cleaners was due primarily to the relatively small six year increase of sixty-four cents in the low wage Georgian Bay region and a large increase of ninety-nine cents in the high wage region of Lake St. Clair. As indicated above, these abnormal wage changes could not be related to a direct impact of arbitration. For maids and engineers, there were also exceptions to the general pattern of uniform six year wage increases. However, they did not have the effect of significantly changing the inter-regional wage dispersion.

Wage Differentials Between Major Cities

The behaviour of inter-city differentials was very similar to that of the inter-regional differentials. No trend towards either a narrowing or widening of inter-city wage rate differentials for maids or third class engineers developed over the five years following the imposition of arbitration, while the dispersion of average rates for porter-cleaners more than tripled over the same period (see Tables A-7, A-8 and A-9).

An impact of arbitration on year to year changes in inter-city differentials can be detected. The twenty-one rates which increased from the previous year by an amount that differed by five or more cents from the increase in the five city average rate are marked with asterisks in the three tables. Arbitrated increases were responsible for the difference being five or more cents in seven of these cases (two asterisks). However, in only two of these seven cases were these increases more important than the wage increases in the other cities in producing year to year fluctuations in the inter-city wage structure.

In summary, it appears that arbitration has had little impact on the inter-region and inter-city wage rate differentials, either in terms of a general compression or abnormal year to year changes. This finding would seem to indicate arbitrators have placed more emphasis on granting wage increases that matched the increases at comparable hospitals rather than granting increases that bring about uniform wage levels and have restricted their comparisons to a limited geo-

graphical area rather than using a relatively large number of hospitals throughout the province for comparative purposes. If this was the case, differentials should have narrowed within economic regions or major cities.

Wage Differentials Within Economic Regions

The impact of arbitration also appears minimal when attention is focused on wages within a given region. Prior to 1965, the mean intra-regional dispersion of contract rates for maids and porter-cleaners was fairly constant from year to year, while it decreased slightly for engineers (see Tables A-10, A-11 and A-12). Since 1965, wage differentials within regions have generally increased for maids and porter-cleaners. In the case of engineers, the decline in these differentials has leveled off.

The tables indicate that following October 1965, the dispersion within most regions began to fluctuate more noticeably from year to year. However, a detailed analysis of the data indicates that this change was not generally due to arbitration. The fifty-one instances in which the standard deviation changed by three cents or more from the previous year are marked by asterisks in the three tables. In only seven (double asterisks) were arbitrated increases responsible for the difference being three cents or more. Four of these seven cases occurred in the Lake Erie region.

Wage Differentials Within Major Cities

As was the case for inter-city comparisons, arbitration has had some impact on year to year changes in intra-city wage differentials. However, it has not produced a long term general decrease or increase in wage dispersion for any of the three occupations considered (see Tables A-13, A-14 and A-15). The eighteen instances in which the standard deviation among hospital rates changed by three cents or more from the previous year are marked by asterisks in the three tables. In eleven of these (double asterisks) relatively high or low

increases resulting from arbitration were responsible for the difference being three cents or more. However, the changes in dispersion in these eleven cases were not sufficiently large or consistent in direction to affect the overall wage rate structure.

The wage analysis to date has encompassed all types (function) of hospitals in Ontario and indicated that arbitration has not led to a general narrowing of differentials even within cities where the cost of living is constant for all. However, Arthurs defined "comparable hospitals" as those of a similar type as well as those in communities with similar cost-of-living and average wage levels. It is conceivable that differentials between hospitals of one type may have decreased. Data on the dispersion of rates at public general hospitals within major cities (see Tables A-16, A-17 and A-18) show this has not occurred. The mean range and standard deviation has not changed significantly in the long run for any of the three occupations.

The wage analysis has covered all contracts that were effective on October 1 of each year. Because hospitals were continually being organized during the period under review, additional wage rates were included in each year's analysis. The rates under first and second agreements were frequently considerably above or below others in the economic region or city affected. In order to determine how the rates at newly organized hospitals affected overall differentials, an analysis was made of the rates at only those hospitals having union contracts as of October 1963. It reveals that for these hospitals the mean dispersion of rates within economic regions and major cities did not vary significantly between 1963 and 1969 for maids, porter-cleaners or engineers (see Table A-19). The mean dispersion within cities was nearly identical to that for all hospitals as previously shown in Tables A-17, A-14 and A-15. However, it appears that the long-term increase in the dispersion of maids' and porter-cleaners' rates within economic regions (previously shown in Tables A-10 and A-11) was due to abnormally high or low rates under contracts between parties that had relatively short bargaining relationships.

In summary, the wage analysis has indicated that arbitration has not led to a narrowing of differentials within economic regions or even within cities where the cost-of-living is constant for all. It appears that in applying the comparable hospital criteria, arbitrators placed more emphasis on granting wage increases that matched the increase at comparable hospitals, rather than granting increases that would result in more uniform wage levels between comparable hospitals.

Table A-1
Average Hourly Wage Rates for Housekeeping Maids
by Economic Region, October 1, 1963 - 69

Economic Region	1963	1964	1965	1966	1967	1968	1969
Northwestern Ontario	.96	.98	1.07	1.10	1.15	1.42	1.60
Northeastern Ontario	1.03	1.07	1.15	1.31	1.43	1.53	1.71
Midwestern Ontario	1.05	1.08	1.15	1.22	1.33	1.53	1.66
Lake Erie	1.06	1.10	1.16	1.25	1.37	1.59	1.78
Georgian Bay	1.10	1.08	1.11	1.20	1.27	1.42	1.60
Lake Ontario	1.10	1.15	1.20	1.28	1.46	1.62	1.80
Niagara	1.12	1.18	1.26	1.33	1.45	1.55	1.73
Lake St. Clair	1.13	1.19	1.25	1.36	1.48	1.61	1.78
Central Ontario	1.13	1.19	1.25	1.34	1.50	1.63	1.77
Eastern Ontario	1.15	1.20	1.29	1.36	1.49	1.61	1.80
Mean	1.08	1.12	1.19	1.28	1.39	1.55	1.72
Range	.19	.22	.22	.26	.35	.19	.20
Standard deviation	.055	.068	.069	.079	.108	.074	.074

Table A-2
Average Hourly Wage Rates for Porter-Cleaners
by Economic Region, October 1, 1963 - 69

Economic Region	1963	1964	1965	1966	1967	1968	1969
Northwestern Ontario	1.27	1.29	1.47	1.51	1.58	1.92	2.07
Northeastern Ontario	1.27	1.32	1.41	1.55	1.70	1.86	2.08
Georgian Bay	1.30	1.34	1.38	1.47	1.53	1.72	1.94
Midwestern Ontario	1.30	1.33	1.41	1.44	1.62	1.88	2.02
Central Ontario	1.31	1.41	1.48	1.58	1.76	1.94	2.11
Lake Erie	1.35	1.42	1.47	1.59	1.72	1.95	2.15
Lake Ontario	1.36	1.40	1.45	1.54	1.69	1.88	2.13
Niagara	1.36	1.41	1.53	1.60	1.81	1.94	2.15
Eastern Ontario	1.37	1.44	1.50	1.61	1.75	1.90	2.13
Lake St. Clair	1.40	1.49	1.59	1.78	1.96	2.16	2.39
Mean	1.33	1.39	1.47	1.57	1.71	1.92	2.12
Range	.13	.20	.21	.34	.43	.44	.45
Standard deviation	.043	.059	.059	.089	.116	.103	.110

Table A-3
Average Hourly Wage Rates for Third Class Engineers
by Economic Region, October 1, 1963 - 69

Economic Region	1963	1964	1965	1966	1967	1968	1969
Georgian Bay	1.96	2.00	2.09	2.33	2.55	2.78	2.96
Lake Erie	2.05	2.15	2.25	2.46	2.70	3.01	3.24
Midwestern Ontario	2.08	2.16	2.23	2.39	2.60	2.78	3.06
Northwestern Ontario	2.16	2.23	2.33	2.42	2.46	2.84	2.96
Niagara	2.19	2.32	2.44	2.60	2.82	3.01	3.24
Eastern Ontario	2.21	2.28	2.39	2.50	2.70	2.90	3.18
Lake Ontario	2.27	2.32	2.40	2.55	2.69	2.84	3.07
Central Ontario	2.39	2.46	2.54	2.68	2.89	3.08	3.32
Northeastern Ontario	2.41	2.50	2.58	2.66	2.84	3.09	3.36
Lake St. Clair	2.50	2.62	2.77	2.89	3.03	3.18	3.51
Mean	2.22	2.30	2.40	2.55	2.73	2.95	3.19
Range	.54	.62	.68	.56	.57	.40	.55
Standard deviation	.163	.175	.185	.157	.161	.134	.170

Table A-4
**Annual Increases in Average Hourly Wage Rates for Housekeeping Maids by Economic Region,
Years Ended September 30, 1964-69**

Economic Region	1964 - 1969 Cents %	1964 Cents %	1965 Cents %	1966 Cents %	1967 Cents %	1968 Cents %	1969 Cents %
Northwestern Ontario	64 66.7	2 2.1	9 9.2	3* 2.8	5* 4.5	27* 23.5	18 12.7
Northeastern Ontario	68 66.0	4 3.9	8 7.5	16* 13.9	12 9.2	10* 7.0	18 11.8
Midwestern Ontario	61 58.1	3 2.9	7 6.5	7 6.1	11 9.0	20 15.0	13 8.5
Lake Erie	72 67.9	4 3.8	6 5.4	9 7.8	12 9.6	22* 16.1	19 11.9
Georgian Bay	50 45.5	2 1.8	3 2.8	9 8.1	7** 5.8	15 11.8	18 12.7
Lake Ontario	70 63.0	5 4.5	5 4.3	8 6.7	18** 14.1	16 11.0	18 11.1
Niagara	61 54.5	6 5.4	8 6.8	7 5.6	12 9.0	10** 6.9	18 11.6
Lake St. Clair	65 57.5	6 5.3	6 5.0	11 8.8	12 8.8	13 8.8	17 10.6
Central Ontario	64 56.6	6 5.3	6 5.0	9 7.2	16 11.9	13 8.7	14 8.6
Eastern Ontario	65 56.5	5 4.3	9 7.5	7 5.4	13 9.6	12 8.1	19 11.8
Mean	64 59.3	3.9 3.6	6.7 6.0	8.6 7.2	11.8 9.2	15.8 11.7	17.2 11.1

* Increase differed by five or more cents from the mean regional increase. Arbitrated wage increases were not responsible for the difference being five or more cents.

** Increase differed by five or more cents from the mean regional increase. Arbitrated wage increases were responsible for the difference being five or more cents.

Table A-5

**Annual Increases in Average Hourly Wage Rates for Porter-Cleaners by Economic Region,
Years Ended September 30, 1964 - 69**

Economic Region	1964-1969 Cents %	1964 Cents %	1965 Cents %	1966 Cents %	1967 Cents %	1968 Cents %	1969 Cents %
Northwestern Ontario	80	2	18	4*	7*	34*	15*
Northeastern Ontario	81	5	9	14	15	16	22
Georgian Bay	64	4	4	9	6*	19	22
Midwestern Ontario	72	3	8	3*	18	26*	14*
Central Ontario	80	10	7	10	18	18	17
Lake Erie	80	7	5	12	13	23	20
Lake Ontario	77	4	5	9	15	19	25**
Niagara	79	5	12	7	21*	13**	21
Eastern Ontario	76	7	6	11	14	15*	23
Lake St. Clair	99	9	10	19*	18	20	23
Mean	79	5.6	8.4	9.8	14.5	20.3	20.2
		4.2	6.1	6.6	9.2	11.9	10.6

* See Table A-4.

** See Table A-4.

Table A-6

**Annual Increases in Average Hourly Wage Rates for Third Class Engineers by Economic Region,
Years ended September 30, 1964-69**

Economic Region	1964 - 1969 Cents %	1964 Cents %	1965 Cents %	1966 Cents %	1967 Cents. %	1968 Cents %	1969 Cents %							
Georgian Bay	100	51.0	4	2.0	9	4.5	24* 11.5	22	9.4	23	9.0	18*	6.5	
Lake Erie	119	58.0	10	4.9	10	4.7	21* 9.3	24*	9.8	31*	11.5	23	7.6	
Midwestern Ontario	98	47.1	8	3.8	7	3.2	16	7.2	21	8.8	18	6.9	28	10.1
Northwestern Ontario	80	37.0	7	3.2	10	4.5	9* 3.9	4*	1.7	38*	15.4	12*	4.2	
Niagara	105	47.9	13	5.9	12	5.2	16	6.6	22	8.5	19	6.7	23	7.6
Eastern Ontario	97	43.9	7	3.2	11	5.3	11	4.6	20	8.0	20	7.4	28	9.7
Lake Ontario	80	35.2	5	2.2	8	3.4	15	6.3	14	5.5	15*	5.6	23	8.1
Central Ontario	93	38.9	7	2.9	8	3.3	14	5.5	21	7.8	19	6.6	24	7.8
Northeastern Ontario	95	39.8	9	3.7	8	3.2	8* 3.1	18	6.8	25	8.8	27	8.7	
Lake St. Clair	101	40.4	12	4.8	15	5.7	12	4.3	14	4.8	15**	5.0	33**	10.4
Mean	97	43.9	8.2	3.7	9.8	4.3	14.6	6.2	18.0	7.1	22.3	8.3	23.9	8.1

* See Table A-4.

** See Table A-4.

Table A-7

**Average Hourly Wage Rates for Housekeeping Maids
by Cities of 150,000 or more Population,
October 1, 1963 - 69**

City	1963	1964	1965	1966	1967	1968	1969
Hamilton	1.18	1.28	1.37	1.43	1.59	1.67**	1.85
London	1.08	1.12	1.18	1.26	1.35	1.65*	1.85
Ottawa	1.22	1.25	1.38	1.44	1.56	1.69	1.87
Toronto	1.23	1.28	1.33	1.39	1.52	1.65	1.77*
Windsor	1.13	1.18	1.26	1.38	1.54	1.73	1.92
Mean	1.17	1.22	1.30	1.38	1.51	1.68	1.85
Range	.15	.16	.20	.18	.24	.08	.15
Standard deviation	.056	.063	.075	.064	.084	.030	.048

- * Rate increased from the preceding year by an amount that differed from the five city average increase by five or more cents. Arbitrated wage increases were not responsible for the difference being five or more cents.
- ** Rate increased from the preceding year by an amount that differed from the five city average increase by five or more cents. Arbitrated wage increases were responsible for the difference being five or more cents.

Table A-8

**Average Hourly Wage Rates for Porter-Cleaners
by Cities of 150,000 or more Population,
October 1, 1963 - 69**

City	1963	1964	1965	1966	1967	1968	1969
Hamilton	1.37	1.40	1.54	1.61	1.90*	1.99**	2.20
London	1.36	1.42	1.48	1.57	1.67*	1.94*	2.17
Ottawa	1.49	1.54	1.60	1.69	1.83**	1.98	2.20
Toronto	1.35	1.47	1.53	1.60	1.78	1.97	2.13*
Windsor	1.42	1.51	1.63	1.84*	2.11*	2.38*	2.65*
Mean	1.40	1.47	1.56	1.66	1.86	2.05	2.27
Range	.14	.14	.15	.27	.44	.44	.52
Standard deviation	.052	.053	.053	.097	.147	.165	.192

* See Table A-7.

** See Table A-7.

Table A-9

**Average Hourly Wage Rates for Third Class Engineers
by Cities of 150,000 or more Population,
October 1, 1963 - 69**

City	1963	1964	1965	1966	1967	1968	1969
Hamilton	2.14	2.30	2.37	2.45	2.84*	3.02	3.21**
London	2.22	2.28	2.40	2.53	2.73	3.03*	3.33
Ottawa	2.37	2.40	2.49	2.59	2.74*	2.96	3.24
Toronto	2.46	2.53	2.60	2.73	2.93	3.11	3.34*
Windsor	2.56	2.68	2.83	2.96	3.10**	3.26**	3.66**
Mean	2.35	2.44	2.54	2.65	2.87	3.08	3.36
Range	.42	.40	.46	.51	.37	.30	.45
Standard deviation	.153	.150	.167	.179	.137	.104	.160

* See Table A-7.

** See Table A-7.

Table A-10

**Dispersion of Hourly Wage Rates (in dollars) for
Housekeeping Maids, by Economic Region,
October 1, 1963 - 69**

Economic Region		1963	1964	1965	1966	1967	1968	1969
Northwestern Ontario	r †	.13	.16	.10	.12	.23	.10	.31
	s.d. #	.041	.047	.032	.032	.068*	.035*	.102*
Northeastern Ontario	r	.12	.19	.21	.40	.31	.28	.30
	s.d.	.047	.061	.065	.131*	.093*	.091	.081
Midwestern Ontario	r	.05	.05	.07	.18	.30	.32	.35
	s.d.	.021	.026	.031	.068*	.107*	.097	.112
Lake Erie	r	.08	.08	.09	.05	.16	.28	.28
	s.d.	.030	.027	.032	.019	.068*	.089	.095
Georgian Bay	r	-	.13	.13	.22	.37	.45	.21
	s.d.	-	.065	.070	.086	.115	.122	.059*
Lake Ontario	r	.26	.24	.22	.32	.20	.21	.14
	s.d.	.099	.102	.101	.151*	.084*	.090	.057*
Niagara	r	.19	.36	.34	.34	.44	.45	.51
	s.d.	.064	.112	.111	.121	.137	.113	.126
Lake St. Clair	r	.33	.32	.30	.18	.27	.39	.35
	s.d.	.104	.098	.092	.058*	.093*	.140*	.145
Central Ontario	r	.39	.40	.32	.41	.32	.35	.35
	s.d.	.111	.108	.094	.093	.076	.066	.086
Eastern Ontario	r	.25	.32	.32	.29	.24	.23	.26
	s.d.	.088	.115	.115	.097	.086	.090	.086
Mean	r	.20	.23	.21	.25	.28	.31	.31
	s.d.	.067	.076	.074	.086	.093	.093	.095

† r = range

s.d. = standard deviation

* Standard deviation changed by three or more cents from the preceding year. Arbitrated wage increases were not responsible for the change being three or more cents.

** Standard deviation changed by three or more cents from the preceding year. Arbitrated wage increases were responsible for the change being three or more cents.

Table A-11

**Dispersion of Hourly Wage Rates (in dollars) for
Porter-Cleaners, by Economic Region, October 1, 1963 - 69**

Economic Region		1963	1964	1965	1966	1967	1968	1969
Northwestern Ontario	r †	.18	.21	.18	.18	.45	.21	.30
	s.d. #	.061	.071	.051	.063	.155*	.091*	.078
Northeastern Ontario	r	.40	.43	.51	.34	.25	.29	.38
	s.d.	.142	.161	.147	.109*	.088	.099	.119
Georgian Bay	r	-	.03	.03	.39	.51	.41	.24
	s.d.	-	.013	.013	.111*	.129	.116	.089
Midwestern Ontario	r	.12	.15	.15	.20	.40	.46	.44
	s.d.	.046	.055	.065	.085	.152*	.137	.141
Central Ontario	r	.18	.53	.47	.58	.51	.51*	.49
	s.d.	.060	.133	.124	.134	.136	.103	.123
Lake Erie	r	.19	.18	.20	.21	.34	.22	.21
	s.d.	.063	.057	.065	.072	.111**	.066**	.067
Lake Ontario	r	.39	.36	.36	.42	.23	.24	.23
	s.d.	.150	.125	.127	.163*	.086*	.102	.076
Niagara	r	.14	.17	.13	.16	.34	.43	.53
	s.d.	.049	.054	.036	.049	.113*	.108	.127
Eastern Ontario	r	.51	.56	.61	.37	.33	.41	.36
	s.d.	.157	.158	.165	.116*	.101	.109	.119
Lake St. Clair	r	.28	.29	.35	.34	.51	.64	.67
	s.d.	.117	.108	.115	.109	.194*	.266*	.298**
Mean	r	.27	.29	.30	.32	.39	.38	.39
	s.d.	.094	.094	.091	.102	.127	.120	.124

† r = range

s.d. = standard deviation

* See Table A-10.

** See Table A-10.

Table A-12

Dispersion of Hourly Wage Rates (in dollars) for Third Class Engineers by Economic Region, October 1, 1963 - 69

Economic Region		1963	1964	1965	1966	1967	1968	1969
Georgian Bay	r †	-	-	.09	.16	.10	.16	.08
	s.d. #	-	-	.045	.080*	.050*	.080*	.040*
Lake Erie	r	.49	.47	.50	.25	.39	.13	.21
	s.d.	.183	.167	.180	.097*	.143**	.046**	.078*
Midwestern Ontario	r	.24	.23	.27	.21	.38	.37	.43
	s.d.	.083	.084	.093	.074	.137*	.144	.133
Northwestern Ontario	r	.06	.07	.07	.14	.26	.14	.13
	s.d.	.025	.024	.023	.049	.104**	.055*	.039
Niagara	r	.36	.34	.49	.35	.26	.46	.28
	s.d.	.112	.106	.153	.147	.085*	.138*	.089*
Eastern Ontario	r	.43	.49	.36	.42	.22	.30	.30
	s.d.	.182	.188	.146	.141	.059*	.092*	.104
Lake Ontario	r	.22	.25	.23	.24	.24	.33	.38
	s.d.	.095	.094	.085	.093	.093	.118	.136
Central Ontario	r	.53	.56	.50	.56	.41	.41	.55
	s.d.	.164	.163	.167	.163	.111*	.109	.109
Northeastern Ontario	r	.43	.40	.35	.38	.32	.36	.42
	s.d.	.163	.139	.116	.112	.118	.162*	.158
Lake St. Clair	r	.33	.31	.41	.52	.40	.33	.46
	s.d.	.114	.108	.143	.182*	.136*	.113	.184**
Mean	r	.34	.35	.33	.32	.30	.30	.32
	s.d.	.125	.119	.115	.114	.104	.106	.107

† r = range

s.d. = standard deviation

* See Table A-10.

** See Table A-10.

Table A-13

**Dispersion of Hourly Wage Rates (in dollars) for
Housekeeping Maids by Cities with Three or more
Hospitals, October 1, 1963 - 69**

City		1963	1964	1965	1966	1967	1968	1969
Hamilton	r †	.10	.26	.20	.26	.20	.15	.25
	s.d. #	.036	.098	.082	.115**	.071*	.057	.098**
London	r	.07	.05	.06	.04	.16	.20	.17
	s.d.	.029	.022	.025	.017	.075**	.084	.070
Ottawa	r	.05	.29	.17	.13	.08	.09	.15
	s.d.	.024	.105	.055	.042	.032	.032	.049
Thunder Bay	r	.13	.15	.0	.0	.0	.0	.0
	s.d.	.047	.055	.0	.0	.0	.0	.0
Toronto	r	.23	.23	.17	.33	.32	.24	.26
	s.d.	.071	.068	.047	.095**	.081	.062	.069
Windsor	r	.14	.11	.13	.13	.16	.15	.05
	s.d.	.050	.039	.051	.046	.058	.056	.018*
Mean	r	.12	.18	.12	.15	.15	.14	.15
	s.d.	.043	.065	.043	.053	.053	.049	.051

† r = range

s.d. = standard deviation

* Standard deviation changed by three or more cents from the preceding year. Arbitrated wage increases were not responsible for the change being three or more cents.

** Standard deviation changed by three or more cents from the preceding year. Arbitrated wage increases were responsible for the change being three or more cents.

Table A-14

**Dispersion of Hourly Wage Rates (in dollars) for
Porter-Cleaners by Cities with Three or more Hospitals,
October 1, 1963 - 69**

City		1963	1964	1965	1966	1967	1968	1969
Hamilton	r †	.14	.17	.04	.16	.17	.24	.29
	s.d. #	.054	.064	.015	.059**	.061	.086	.107
London	r	.19	.18	.20	.17	.31	.22	.21
	s.d.	.079	.074	.082	.076	.127**	.090**	.087
Ottawa	r	.13	.17	.36	.24	.15	.23	.29
	s.d.	.053	.067	.110	.074*	.064	.068	.090
Thunder Bay	r	.15	.18	.0	.0	.0	.0	.0
	s.d.	.060	.070	.0	.0	.0	.0	.0
Toronto	r	.09	.44	.36	.48	.51	.37	.43
	s.d.	.033	.139	.121	.152**	.156	.099*	.111
Windsor	r	.28	.21	.24	.23	.35	.22	.24
	s.d.	.109	.079	.082	.087	.131*	.105	.094
Mean	r	.16	.23	.20	.21	.25	.21	.24
	s.d.	.065	.082	.068	.075	.090	.075	.082

† r = range

s.d. = standard deviation

* See Table A-13.

** See Table A-13.

Table A-15

**Dispersion of Hourly Wage Rates (in dollars) for Third
Class Engineers by Cities With Three or more Hospitals,
October 1, 1963 - 69**

City		1963	1964	1965	1966	1967	1968	1969
Hamilton	r †	.22	.09	.04	.05	.05	.15	.22
	s.d. #	.099	.037	.017	.021	.024	.062**	.090
Kitchener	r	.11	.06	.09	.20	.26	.31	.43
	s.d.	.045	.028	.037	.082**	.113*	.136	.178**
Ottawa	r	.03	.31	.16	.11	.19	.11	.09
	s.d.	.011	.110	.055	.041	.058	.031	.029
Thunder Bay	r	.06	.07	.04	.03	.0	.05	.04
	s.d.	.027	.026	.016	.023	.0	.022	.017
Toronto	r	.50	.53	.44	.48	.32	.41*	.33
	s.d.	.124	.123	.129	.133	.093*	.103	.094
Windsor	r	.09	.0	.0	.0	.0	.0	.0
	s.d.	.039	.0	.0	.0	.0	.0	.0
Mean	r	.17	.18	.12	.15	.14	.17	.19
	s.d.	.058	.054	.042	.050	.048	.059	.068

† r = range

s.d. = standard deviation

* See Table A-13

** See Table A-13

Table A-16

**Dispersion of Hourly Wage Rates (in dollars) for
Housekeeping Maids Employed in Public General Hospitals
by Selected Major Cities, October 1, 1963 - 69**

City		1963	1964	1965	1966	1967	1968	1969
Hamilton	r †	.04	.21	.19	.19	.0	.0	.25
	s.d. #	.020	.105	.095	.095	.0	.0	.125
Ottawa	r	.05	.29	.07	.06	.08	.09	.15
	s.d.	.025	.123	.029	.025	.033	.042	.069
Thunder Bay	r	.11	.13	.0	.0	.0	.0	.0
	s.d.	.052	.061	.0	.0	.0	.0	.0
Toronto	r	.02	.02	.02	.11	.10	.14	.23
	s.d.	.010	.007	.010	.035	.039	.039	.055
Windsor	r	.0	.0	.09	.13	.06	.04	.03
	s.d.	.0	.0	.039	.057	.024	.017	.014
Mean	r	.04	.13	.07	.10	.05	.05	.13
	s.d.	.021	.059	.035	.042	.019	.020	.053

† r = range

s.d. = standard deviation

Table A-17

**Dispersion of Hourly Wage Rates (in dollars) for
Porter-Cleaners Employed in Public General Hospitals by
Selected Major Cities October 1, 1963 - 69**

City		1963	1964	1965	1966	1967	1968	1969
Hamilton	r †	.10	.14	.04	.04	.0	.0	.29
	s.d. #	.050	.070	.020	.020	.0	.0	.145
Ottawa	r	.13	.17	.16	.16	.14	.23	.29
	s.d.	.065	.078	.068	.066	.066	.095	.121
Thunder Bay	r	.15	.18	.0	.0	.0	.0	.0
	s.d.	.061	.074	.0	.0	.0	.0	.0
Toronto	r	.05	.05	.21	.12	.35	.26	.38
	s.d.	.018	.019	.073	.045	.125	.103	.099
Windsor	r	.09	.06	.08	.22	.19	.0	.0
	s.d.	.045	.030	.036	.091	.097	.0	.0
Mean	r	.10	.12	.10	.11	.14	.10	.19
	s.d.	.048	.054	.039	.044	.096	.040	.073

† r = range

s.d. = standard deviation

Table A-18

**Dispersion of Hourly Wage Rates (in dollars) for Third
Class Engineers Employed in Public General Hospitals by
Selected Major Cities,
October, 1, 1963 - 69**

City		1963	1964	1965	1966	1967	1968	1969
Hamilton	r †	.02	.04	.02	.05	.05	.05	.12
	s.d. #	.010	.020	.010	.025	.025	.025	.060
Ottawa	r	.02	.30	.25	.11	.11	.11	.04
	s.d.	.010	.137	.067	.045	.058	.045	.019
Thunder Bay	r	.02	.05	.03	.03	.0	.0	.0
	s.d.	.010	.024	.014	.013	.0	.0	.0
Toronto	r	.18	.19	.44	.48	.27	.29	.33
	s.d.	.054	.061	.126	.138	.082	.088	.103
Windsor	r	.09	.0	.0	.0	.0	.0	.0
	s.d.	.042	.0	.0	.0	.0	.0	.0
Mean	r	.07	.14	.15	.13	.09	.09	.10
	s.d.	.025	.048	.043	.044	.033	.032	.036

† r = range

s.d. = standard deviation

Table A-19

**Dispersion of Hourly Wage Rates (in dollars) within
Economic Regions and Major Cities¹ for Maids,
Porter-Cleaners and Engineers at Hospitals
having Union Contracts as of October 1963, - 69**

Dispersion	1963	1964	1965	1966	1967	1968	1969
Mean Range Within Regions							
Maids	.20	.23	.21	.22	.25	.22	.22
Porter-Cleaners	.27	.29	.29	.29	.31	.29	.30
Engineers	.36	.34	.34	.34	.33	.27	.32
Mean Range Within Major Cities							
Maids	.12	.15	.10	.12	.15	.13	.13
Porter-Cleaners	.16	.23	.16	.19	.24	.18	.20
Engineers	.17	.13	.10	.12	.14	.16	.18

¹ Hamilton, Kitchener, London, Ottawa, Thunder Bay, Toronto, Windsor.

APPENDIX B

INDUSTRIES AND OCCUPATIONS USED TO COMPUTE AN AVERAGE FEMALE LABOUR RATE

Industry	Occupation
Slaughtering and Meat Processing	Bacon Wrapper and Packer
Biscuits	Packer
Bakeries	General Helper
Confectionary	Wrapper (hand)
Other Rubber Products	Trimmer and Finisher
Leather Tanneries	Finisher (Doper; Seasoner)
Shoe Factories	Table Worker
Woollen Yarn and Cloth	Winder, Spooler and Reeler
Synthetic Textiles	Thrower
Hosiery and Other Knitted Goods	Kaumographer
Men's Clothing	Cleaner and Basting Puller
Paper Boxes and Bags	Wrapping Machine Operator
Household Radio and Television Receivers.	Assembler (simple)
Electrical Industrial Equipment	Assembler
Pharmaceuticals, Medicines and Toilet Preparations	Filler and Packager

